

Appl. No. 09/270,128

Amendment Dated November 7, 2007

Reply to Office Action Dated May 11, 2007

### **REMARKS/ARGUMENTS**

Please reconsider the application in view of the above amendments and the following remarks. Claims 1-27 remain in this application. Independent Claims 1, 10, 15, 16, 20, 22, 24, and 26 are amended herein. No new matter has been added by way of these amendments.

Applicant notes that the Examiner has considered Applicant's amendment of January 5, 2007, but has maintained his rejection. Applicant requests reconsideration in view of the enclosed arguments and amendments.

#### **I. Interview Summary**

On November 7, 2007, Applicant's representative, Jennie Salazar, had a telephone interview with Examiner Dr. Thangavelu. In the interview, Applicant discussed with the Examiner the proposed claim amendments provided herein. The Examiner made no final decision in the interview and indicated that an additional search would be required. However, the Examiner did indicate that, if no new art was found in the additional search, the amended claims would be allowable. Applicant appreciates the Examiner's consideration of the proposed amendments to the claims and the opportunity to discuss such claims in an interview with the Examiner.

#### **II. Claim Amendments**

Applicant has amended each independent claim to recite that "each superset is a test data file for performing a simulation and defines a case scenario of its related set." Support for this amendment is provided, for example in Figure 14 and at paragraphs 0010, 0011, 0017, 0064, 0067, 0068, 0075, 0076, 0077 and the Abstract. Applicant believes that this amendment clarify the definition of a superset and distinguishes it from the cited art.

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### III. Rejection(s) under 35 U.S.C § 103

The Examiner rejected Claims 1-27 under 35 U.S.C. § 103(a) as being unpatentable over various combinations of Huang, et al. (U.S. Patent No 6,151,582) (HU) and Rumbaugh, et al. (Object oriented modeling and Design, 1991) (RU), Cowgill (U.S. Patent No. 5,835,566) and/or Guneseekara (U.S. Patent No. 6,018,497). Applicant respectfully traverses the rejection(s). Applicant submits that the Examiner has failed to establish a prima facie case of obviousness in that the cited references fail to teach each limitation as claimed, there is no motivation to combine the cited references and the combination of references fails to achieve the claimed invention.

The Examiner suggests that Huang in combination with Rumbaugh renders Applicant's invention obvious. In support of the rejection, the Examiner stated the following in the Office Action dated May 11, 2007:

Huang et al. teaches Col 94, Lines 42-45, databases or instances of visual objects that can be saved as scenarios which contain edited data; displays at Fig. 52 and Fig. 59, a tree-like structure of edited data; and at and Col 104, Lines 35-45, saving edited data in the tree-like structure. The examiner interprets this to mean a case manager adapted for storing a plurality of sets and supersets of test data files, the sets and supersets of test data files being stored in the case manager in the form of a tree like structure. The Examiner also takes the position that there is no constraint in the tree-like database to the amount of data in various sets and supersets.

Applicant submits that Huang describes a decision support system for managing an agile supply chain. Key to Huang's invention is the use of multiple tree-views (*see Col. 94, lines 5-6*) and data and decision integration to provide a Network Simulator (*Col. 95, lines 42-43*). The system provided by Huang is intended to allow decision makers to view the chain from their own perspective and understand their decisions on the supply chain as a whole (*Col. 1, lines 46-48*).

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While Huang may describe a tree-like listing of available products (Col. 104, line 40), there is no disclosure of a superset that is a test data file for performing a simulation and defines a case scenario of its related set as recited in the claims. Huang fails to provide teachings of the configuration of the tree-like structure or the definition of the sets therein. Huang, therefore, fails to anticipate or render obvious applicant's claims.

Moreover, Huang's invention requires an integration of the network simulator (*Col. 95, lines 42-43*). Applicant submits that such integration requires interaction of the subclasses within the tree-like structure to perform the simulation. No such interaction is provided between Applicant's supersets. Applicant's supersets are data files for performing a simulation and do not involve the interaction therebetween as suggested by Huang. Thus, Applicant submits that Huang teaches away from Applicant's claimed invention and fails to support a finding of obviousness of Applicant's claims.

The Examiner concedes that Huang fails to teach all of the limitations recited in the pending claims. However, the Examiner suggests that Rumbaugh provides the missing teachings. In support of this conclusion, the Examiner states the following in the Office Action of May 11, 2007:

Huang et al. does not expressly teach each superset being a superset of its related sets and the sets and supersets of test data files being stored in the case manager in the form of a hierarchical, non-conventional tree like structure, having a root and one or more leaves, the tree like structure being non-conventional in that one or more of the supersets underlie corresponding ones of the sets in the tree like structure, such that one of more of the sets is situated between the root and the corresponding superset. Rumbaugh et al. teaches each superset being a superset of its related sets and the sets and supersets of test data files being stored in the case manager in the form of a hierarchical, non-conventional tree like structure, having a root and one or more leaves, the tree like structure being non-conventional in that one or more of the supersets underlie corresponding ones of the sets in the tree like structure, such that one or more of the sets is situated

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between the root and the corresponding superset (Page 39, Para 3 and Para 5; Fig. 3.23; while Rumbaugh et al. depicts a subclass below its corresponding claims, the subclass can derive information from higher class as shown in Figure 3.23; the subclass contains more information than the class or superclass above it; the subclass forms a superset (having more data) of the class or superclass (having less data) above it, while the class or superclass forms a set; as one goes down the class structure, more and more data is available to the lower classes, thus they forming supersets of the classes or superclasses (sets) above them; there is also no constraint in the database to the amount of data in various sets and supersets and the type of data in the sets and supersets).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the organizing and managing system of Huang et al. with the organizing and managing system of Rumbaugh et al. that included each superset being a superset of its related sets and the sets and supersets of test data files being stored in the case manager in the form of a hierarchical, non-conventional tree like structure, having a root and one or more leaves, the tree like structure being non-conventional in that one or more of the supersets underlies corresponding ones of the sets in the tree like structure, such that one or more of the sets is situated between the root and the corresponding superset because that would allow sharing similarities among sets, while preserving their differences (Page 38, Para 4) and modeling by structuring the sets and would be helpful for reusing the sets (Page 41, Para 3).

Applicant does not dispute that Rumbaugh provides teachings relating to inheritance and ancestor/descendent relationships. However, the non-conventional tree-like structure and the superclasses claimed by Applicant are clearly different. According to Rumbaugh, "only one property should be discriminated at once." *See Rumbaugh p. 39, last full paragraph.* Rumbaugh further states that the subclasses of an ancestor class "not only inherits all the features of its ancestors but adds its own specific attributes and operations as well." *See Rumbaugh p. 39, 2<sup>nd</sup> full paragraph.* As shown below left, Rumbaugh teaches a conventional tree structure with Equipment defined as a superclass/superset at the root, and the various types of equipment defined as subclass/set at the leaves. Please note that Rumbaugh provides the following characteristics: 1) each of the subclasses makes up a portion of the superclass (e.g. pump, heat

exchange and tank are separate pieces of equipment), and 2) the subclasses add new attributes (e.g. the pump has additional information relating to the flow rate).



In contrast, as shown above right, the claimed invention uses a non-conventional tree-like structure with one or more of the supersets (e.g. new-1-0) below the set (e.g. 58 new-1). As recited in the amended claims, each superset is a test data file for performing a simulation and defines a case scenario of its related set. Each of Applicant's superset is a test data file that can be used to perform the complete simulation, rather than having subclasses that only provide a portion of the data as described in Rumbaugh. Moreover, each superset is of the same type and

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contains similar information without the additional attributes as described in Rumbaugh. Thus, Rumbaugh fails to provide the supersets as recited in Applicant's amended claims.

In fact, Rumbaugh teaches away from supersets as defined by Applicant by providing that the subclasses define portions of the superclass and by providing that the subclasses contain additional attributes. Such teachings would deter one of skill in the art from providing supersets (e.g. 62 new-1-0 and 64 new -1-1 of Fig. 14) that are case scenarios of a parent set (e.g. 58 new-1 in Fig. 14), and that can be used to perform a simulation. Rumbaugh, therefore, fails to support a rejection of obviousness against the claimed invention.

Applicant reiterates its arguments as previously presented in the Office Action Responses of record. As described therein, the additional cited references, namely Cowgill and Gunesakara, fail to provide the missing limitations described above.

In view of the above, Applicant asserts that the cited art alone and/or in combination fails to provide the invention as claimed. For at least these reasons, Applicant submits that the Examiner has failed to establish a prima facie case of obviousness under 35 U.S.C. § 103. Applicant, therefore, submits that the amended claims are novel and non-obvious over the cited art and requests removal of the rejections under 35 U.S.C. § 103.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Applicant believes this reply to be fully responsive to all outstanding issues and place this application in condition for allowance. If this belief is incorrect, or other issues arise, do not hesitate to contact the undersigned at the telephone number listed below.

This paper is submitted in response to the Office Action dated May 11, 2007, for which the three-month date for response is August 11, 2007. Applicant hereby petitions for a three-

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month extension of time, bringing the period of response to November 13, 2007 (November 11 is a Sunday, November 12 is a holiday). Please apply any charges not covered or any credits, to Deposit Account 07-1078 (Reference Number 94.0016).

Date: 11/7/07

Respectfully submitted,

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